

DOCUMENT RESUME

ED 462 745

EA 031 557

AUTHOR Gorard, Stephen
TITLE The Long Term Impact of School Choice in the United Kingdom. Occasional Paper.
INSTITUTION Columbia Univ., New York, NY. National Center for the Study of Privatization in Education.
REPORT NO NCSPE-OP-13
PUB DATE 2001-02-00
NOTE 15p.
AVAILABLE FROM For full text: <http://www.ncspe.org>.
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Elementary Secondary Education; Foreign Countries; *School Choice; Social Stratification; *Socioeconomic Influences
IDENTIFIERS *United Kingdom

ABSTRACT

This paper is in part an answer to the question posed in a recent issue of "Educational Researcher" by Goldhaber: "School choice: do we know enough?" It also summarizes the results on the relationship between school choice and social segregation in the United Kingdom. Data used in this paper come from several sources, including official statistics and interviews with local education authorities. School choice was substantially increased in 1988; the analysis is based on the entire United Kingdom student cohort and for every year between 1989 and 1999. A range of segregation measures were used, though the results are invariant to the index used. Socioeconomic stratification in all secondary schools in England declined from a high of 36 percent in 1989 to around 30 percent by 1996, but rose to 32 percent by 1999. There is no evidence that within this decline in stratification, a subset of schools went into a "spiral of decline." The decline in differences in attainment between social groups may be the result of market reforms having worked, or a result of a larger trend arising from the United Kingdom's history of continuous improvement and "comprehensivization" in schooling. Other possible factors are greater "equality in poverty" and school reorganizations. (Contains 38 references.) (RT)

Occasional Paper No. 13

National Center for the Study of Privatization in Education

Teachers College, Columbia University

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- ☒ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

S. Gorard

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

The Long Term Impact of School Choice in the United Kingdom

Stephen Gorard*

February 2001

Abstract— This paper summarizes the results on the relationship between school choice and social segregation in the United Kingdom. School choice was substantially increased in 1988, and the analysis is based on the entire UK student cohort and for every year between 1989 and 1999. A range of segregation measures were used, although the results are invariant to the index used. Socio-economic stratification in all secondary schools in England declined from a high of 36% in 1989 to around 30% by 1996, but rose to 32% by 1999. There is no evidence that within this decline in stratification, a subset of schools went into a 'spiral of decline'.

© 2001 Stephen Gorard

* Stephen Gorard is Senior Lecturer at Cardiff University School of Social Sciences

The Occasional Paper Series of the National Center for the Study of Privatization in Education (NCSPE) is designed to promote dialogue about the many facets of privatization in education. The subject matter of the papers is diverse, including research reviews and original research on vouchers, charter schools, home schooling, and educational management organizations. The papers are grounded in a range of disciplinary and methodological approaches. The views presented in these papers are those of the authors and do not necessarily represent the official views of the NCSPE.

If you are interested in submitting a paper, or wish to learn more about the NCSPE, please contact us at:

NCSPE
Box 181
Teachers College, Columbia University
525 W. 120th Street
New York, NY 10027

(212) 678-3259 (telephone)
(212) 678-3474 (fax)
ncspe@columbia.edu
www.tc.columbia.edu/ncspe

Introduction

This article is in part an answer to the question posed in a recent issue of Educational Researcher by Goldhaber (2000) – ‘School choice: do we know enough?’ – and it is also a summary of the findings of what is so far the largest scale study of a national system of school choice (see Gorard and Fitz 2000a). As such, the paper refers to a great deal of empirical evidence from the United Kingdom, evidence concerning the long-term impact of markets in education of the type that commentators have rightly complained, and some are still claiming, does not exist (Archbald 1996, Fuller et al. 1996, Goldring and Hausman 1999, Jeynes 2000). We hope therefore to bring this evidence to the attention of a wider audience. There is insufficient space here to rehearse the varied data sources, methods of analysis, and all of the findings thus far, and so the reader is directed to existing publications concerning these throughout the text.

In the UK, unlike the United States, a national program of parental choice of schools has been implemented. We have described the various policy instruments and subsequent court rulings in more detail elsewhere (White et al. 2001). The key legislation was the Education Reform Act of 1988 (henceforth ERA88) which gave all families the right to express a preference for any school (even one outside their local education authority), and denied schools the right to refuse anyone entry until a standard or planned admission number was reached. Previously local authorities allocated children to schools almost entirely on the basis of where they lived. Parents now have the right to appeal against their allocated schools. Funding to schools follows students *per capita*, making this effectively a national 'voucher' scheme. Since 1988 the number of families selecting schools other than the local catchment (neighborhood) school has grown greatly, as has the number of families taking their case to appeal when not successful. Academic researchers in the UK have responded to this legislation by considering the nature of this limited market (e.g. Le Grand and Bartlett 1993), the reasons reported by families for choosing a school (e.g. David et al. 1994) and the

process of choice itself (Gewirtz et al. 1995). Until recently, less work has been done on the impact of choice, and on considering how effective it has been (Gorard 1999).

In considering the longer-term impact of school choice it is important to recall the possible objectives of the legislation. School choice is purported to have three main advantages over a system of strict area allocation to school (Friedman and Friedman 1980, see also Witte 1990), and the loose alliance of politicians who pushed through the mixture of measures in the ERA88 probably represent each of these constituencies. First: there is the libertarian notion of choice for its own sake (Erickson 1989). We all appreciate choice as consumers in some areas, so why not in others? This approach is apparently justified by the popularity of school choice programs in opinion polls, and in the increasing participation of many sections of society after such policies have been introduced. We do not examine this claim any further here. Second: there is the argument for equity (Cookson 1994). Choice of school extends a privilege to all that was previously available only to those able to afford houses in desirable suburban catchment areas, or to send their child to a fee-paying school. Poor children and those from ethnic minority families are now able, in principle, to 'break the iron cage of zoning' (Waslander and Thrupp 1997). The third argument, which is perhaps the most important for choice advocates, is that market forces will drive up educational standards (Chubb and Moe 1990). Successful schools will be popular, and weaker schools will be unpopular, progressively losing their *per capita* funding until they either improve or close. Over time, therefore, the general standard of schools will be higher. This paper summarizes our evidence from the UK relating to the last two of these issues.

Methods and Data

The data used in this paper come from several datasets. One is based on official statistics, and contains a record for each school in England and Wales for every year from 1989-1999 which includes figures for school organization, examination outcomes, unauthorized absences, the number

of pupils on roll, the number eligible for and taking free school meals, and the number from each ethnic group, first language, and measures of special educational need. Another is a collection of interviews with a variety of LEA officials from a sub-sample of 40 local education authorities (LEAs). In considering changes in school composition over time, and whether schools are now more or less stratified in socio-economic terms, we have used a number of indicators (especially poverty) and a number of analytical indices (especially the strict exchange proportion, Gorard 2000a). In general, we feel that the methods of analysis, the number of triangulating indicators, and the sheer scale of our evidence overcomes the minor problems we have inevitably encountered. The summary of results is presented in two sections, relating to changes in stratification and in school effects.

Changes in Between-School Stratification

The degree of socio-economic stratification in all secondary schools in England (those catering for children aged 11 and above), using the most reliable and complete indicator of disadvantage (eligibility for free school meals), declined from a high of 36% in 1989 to around 30% in 1996 before rising to 32% by 1999. Therefore, around one third of students would have to change schools in order for there to be an even spread of 'poor' children between schools. The relevant legislation, enacted in 1988, only began to take effect in schools in 1989 and had increasing impact for successive cohorts. In the year following the ERA88 there was a slight increase in between-school stratification, followed by a marked decline which appears to have flattened out and settled at a significantly lower level by 1995. Only in very recent years has this begun to rise (and subsequent to, among other things, a change of government in the UK and the introduction of the School Standards and Framework Act).

This finding, of an overall decline in socio-economic stratification between schools, remains whatever index is used. It is also true of all indicators used in addition to FSM, including ethnicity,

first language, and statements of special educational need. Secondary schools are now more mixed than they were in 1989. A similar analysis shows the same picture for primary schools on all indicators. So, our results apply to over 8 million students in 25,000 schools over 11 years. The fall in stratification also appears in each economic region of England (and Wales) analyzed separately, and in the overwhelming majority of local authorities, and school districts (Gorard and Fitz 2000b). Analyzed at any level of aggregation, schools have generally converged over time in terms of their socio-economic composition.

Additionally, we found no evidence that the process of school choice has led some schools into 'spirals of decline' in which they lose both market share and become increasingly stratified in terms of indicators of disadvantage. The number of children in secondary schools increased during the period 1989-99 while the number of schools decreased (to reduce surplus places). Therefore, most schools have increased their average number of students even where they are seen as less desirable in their local 'markets'. In addition to simple loss of numbers we also considered schools threatened with closure, and those declared to be failing ('Special Measures'). Of the few schools ending the period in question with smaller numbers on roll the vast majority had an improved (i.e. nearer even) socio-economic composition. From our database we have so far been able to identify only one school that both lost market share and had a growing proportion of pupils from families in poverty (Taylor et al. 2000a). There is no reason to assume that such rare patterns of change have not always occurred, irrespective of the policy in operation.

Changes in School Outcomes

The most commonly used measure of school outcomes in the UK is the General Certificate of Secondary Education (GCSE) and its equivalents. At least one GCSE is taken by around 95% of the 15-year-old age cohort each year. Around 90% of the cohort obtain at least one GCSE at the lowest grade (G), and around 50% obtain five or more 'good' passes (grade A*-C). All such

indicators have risen since the introduction of the Education Reform Act 1988. The percentage obtaining five good passes has increased year-on-year from 1975 to 1998 (DfEE 1998). The same source also shows an *improved* increase from the late 1980s, after the introduction of school choice.

We are, however, unable simply to attribute this raw-score improvement to market forces for there were many policy changes all taking place at the same time. Treating our analysis as a 'natural experiment', we would say that there are important confounding variables (Gorard 2001). These include changes in the collection of figures over time, in the definition of the relevant age cohort, and in the nature of the qualifications themselves. Most notably the introduction of the GCSE (to replace GCE and CSE) in 1986/87 heralded an increase in coursework at the expense of terminal examinations, and the abolition of strict norm-referencing which had previously worked to maintain results at a relatively constant level (Foxman 1997). It is at least possible therefore that the improvement since 1988 is based on what has been termed, perhaps rather uncharitably, 'counterfeit excellence' (Zirkel 1999).

What this natural experiment requires is a control group, which might be provided by the private or fee-paying sector. Around 7% of students in England and 2% in Wales attend fee-paying schools. These schools have always existed in a market – a very real and volatile one in which money changes hands and schools 'go to the wall' (Gorard 1997). Legislation such as the Education Reform Act 1988 had no direct effect on fee-paying schools. The 'experimental' treatment is the introduction of the limited market which affected only state schools, whereas changes in the nature of assessment affected both groups equally. It is clear that state-funded schools have been catching up with fee-paying schools at all levels of attainment (Gorard and Taylor 2001), and recent figures confirm this trend (Howson 2000). Possible confounds to this natural experiment include changes in the type and proportion of fee-paying users over the period in question. As with any 'experiment' it is important to replicate the results if possible. We are working on a characterization of local areas where market

activity is high, and where such activity is low. Our test would then be whether the gain score in terms of examination results was greater in the high activity area.

A third way of assessing changes over time is based on the changing relationship between background variables (socio-economic context) and school attainment (outcome scores). For example it is clear that measures of student poverty such as eligibility for free school meals (FSM) and student achievement are strongly negatively related (Gorard 2000b). One reasonable interpretation of a genuine improvement in an era of increasing raw-scores would be that outcomes are no longer as socially determined as they were previously. Children from poor families would now be more likely to obtain their 'fair share' of the qualification spoils than they were in previous cohorts. Our early findings suggest that this is not, in fact, so. We used multiple regression models with the school GCSE benchmark as the dependent variable, and a basket of indicators including ethnicity, poverty, first language, gender, school type, and additional educational needs. The R squared values remain at very close to 90% for all years, with no indication at all of an improvement (reduction) over time. In each year the key predictor, using a forward stepwise approach, was the local level of poverty. Whatever the improvements in raw-scores over time it is clear that these have not 'broken' the well-established link between student background and school outcomes. In apparent confirmation of this, a study at the Centre for Longitudinal Studies in London has been reported as showing that children from poor families are no more likely to get qualifications than they were 20 years ago (Hackett 2000). Similar conclusions, but for different reasons and using different methods, have also been drawn in France (Duru-Bellat and Kieffer 2000).

Around 90% of the variation in school outcomes can be explained by student background characteristics and the nature of their school, and this figure is relatively constant over time (the independent variables for 1988/99 are more accurate than for other years). Given that these models also include an error component, there is little variance (from 100%) left to attribute to a school, or

even a school system, effect. The possibility of discovering any improvement in this relatively small school effect over time would seem difficult enough. To partition out any of this improvement which is a direct result of market forces would appear nearly impossible. In this we agree with the conclusion of Plewis (1999) that the most effective way to tackle inequality in education is by addressing poverty. The variation between school outcomes is very small (much smaller than within schools), so that strategies like the market that are aimed at schools or larger units like EAZs, rather than individuals, are likely to fail. "Over the past 25 years . . . studies show that individual and family background traits explain the vast majority of the variance in student test scores, and observable school characteristics, such as per-pupil spending, teacher experience, or teacher degree level, have at best a weak relationship with student outcomes" (Goldhaber et al. 1999, p.199).

Nevertheless, differences in attainment between identifiable social groups are declining. We have dealt with this decline in more detail elsewhere (e.g. Gorard et al. 1999). Using valid proportionate analyses, differences in attainment have declined as measured between: the highest and lowest achievers; ethnic groups; boys and girls; economic regions, and school sectors. Despite the continued importance of socio-economic, as opposed to educational, determinants of school outcomes the system as a whole is therefore becoming fairer (Gorard 2000a).

Can We Explain Our Findings?

Schools are now significantly more socially mixed than in 1988 in the sense that the intake to each school is now generally a better reflection of the wider society from which it recruits (at least in terms of the most disadvantaged sections of each community). Their measurable outcomes are now significantly greater than in 1988, and differential attainment between identifiable socio-economic groups has been reduced. Taking a long-term view, education in the UK would appear to be moving in the right direction. We have so far suggested a variety of possible explanations for these findings. In summary we set out to test at least six main hypotheses.

- Market reforms have worked, in the sense of allowing poor families to use schools in areas they cannot afford to live in, and encouraging schools to concentrate on improving examination scores. Out-of-catchment enrollment has increased among poor families, and appeals against allocation are now almost universal.
- What we have observed is a small part of a much larger trend dating back to 1944 and before, and unrelated to specific market policies. The history of UK schooling has generally been one of continuous improvement and 'comprehensivization'.
- School stratification could be primarily due to residential stratification (which explains around half of the variance in school admissions). Therefore, either the policy of open enrollment broke the rigid link between area of residence and school allocation, or residential stratification has declined over the same period (Taylor and Gorard 2001).
- Although our analytical tools are strongly composition-invariant (Taylor et al. 2000b) it is notable that the period 1989-96 involved a growth in indicators of poverty, while 1997-99 reveals a decline. What we may be seeing is therefore greater 'equality of poverty'.
- School reorganizations, especially closures, may have mixed up previous school intakes in new ways.
- The changes can be explained through the way in which local school admission authorities have interpreted the policy changes. LEAs have worked to protect schools by managing the admissions system, chiefly in terms of numbers and budget-share, in some cases by not adhering to the national legislation (and in one LEA by not apparently being *aware* of the relevant legislation).

There appears to be some truth in all of these possible explanations, and others like them. The remainder of our project will focus on piecing together more fully the various components of our evidence base.

Our evidence has been the subject of some dispute, sometimes on methodological grounds but more often on ideological ones (and it has also been used by both left- and right-wing pressure groups, to defend the record of community schools or justify neo-liberal policies respectively). To some extent though the lack of the widely-expected changes as a result of introducing a policy of increased school choice is hardly surprising. Some observers had already suggested that this was a likely outcome (Levin and Riffel 1997, Gorard 1997), and others in the US are discovering that competitive schemes such as the Cleveland Voucher Experiment (McGuinn and Hess 2000) and the Milwaukee Charter Scheme (Hess 2000) have produced no obvious reaction (other than symbolic ones by marketers and teachers' unions) and little discernible change in the administration or

leadership of publicly-funded schools. It is easy to exaggerate the significance of national policies in education, and important for analysts to retain a model in which such changes are heavily mediated by the actions of local agencies.

References

- Archbald, D. (1996) Measuring school choice using indicators, *Education Policy*, 10, 1, 88-101
- Chubb, J. and Moe, T. (1990) *Politics, markets and America's schools*, Washington: Brookings Institute
- Cookson, P. (1994) *School choice*, Yale: Yale University Press
- David, M., West, A. and Ribbens, J. (1994) *Mother's Intuition? Choosing Secondary Schools*, East Sussex: Falmer Press
- DfEE (1998) *Statistics of education: schools in England 1998*, London: HMSO
- Duru-Bellat, M. and Kieffer, A. (2000) Inequalities in educational opportunities in France: educational expansion, democratization or shifting barriers?, *Journal of Education Policy*, 15, 3, 333-352
- Erickson, D. (1989) A libertarian perspective on schooling, in Boyd, W. and Cibulka, J. (Eds.) *Private schools and public policy*, London: Falmer Press
- Foxman, D. (1997) *Educational league tables: for promotion or relegation?*, London: Association of Teachers and Lecturers
- Friedman, M. and Friedman, R. (1980) *Free to choose*, Harmondsworth: Penguin
- Fuller, B., Elmore, R. and Orfield, G. (1996) Policy-making in the dark, in Fuller, B. and Elmore, R. (Eds.) *Who chooses? Who loses?*, New York: Teachers College Press
- Gewirtz, S., Ball, S. and Bowe, R. (1995) *Markets, Choice and Equity in Education*, Buckingham: Open University Press
- Goldhaber, D. (2000) School choice: do we know enough?, *Educational Researcher*, 29, 8, 21-22
- Goldhaber, D., Brewer, D. and Anderson, D. (1999) A three-way error component analysis of educational productivity, *Education Economics*, 7, 3, 199-208
- Goldring, E. and Hausman, C. (1999) Reasons for parental choice of schools, *Journal of Education Policy*, 14, 5, 469-490
- Gorard, S. (1997) *School Choice in an Established Market*, Aldershot: Ashgate
- Gorard, S. (1999) 'Well. That about wraps it up for school choice research': a state of the art review, *School Leadership and Management*, 19, 1, 25-47
- Gorard, S. (2000a) *Education and Social Justice*, Cardiff: University of Wales Press

- Gorard, S. (2000b) 'Underachievement' is still an ugly word: reconsidering the relative effectiveness of schools in England and Wales, *Journal of Education Policy*, 15, 5, 559-573
- Gorard, S. (2001) *The role of numbers made easy. Quantitative Methods in Educational Research*; London: Continuum
- Gorard, S. and Fitz, J. (2000a) Markets and stratification: A view from England and Wales, *Educational Policy*, 14, 3, 405-428
- Gorard, S. and Fitz, J. (2000b) Investigating the determinants of stratification between schools, *Research Papers in Education*, 15, 2, 115-132
- Gorard, S. and Taylor, C. (2001) *Market forces and standards in education: a preliminary consideration, Measuring Markets: the case of the ERA 1988 Working Paper 38*, Cardiff: Cardiff University School of Social Sciences
- Gorard, S., Salisbury, J. and Rees, G. (1999) Reappraising the apparent underachievement of boys at school, *Gender and Education*, 11, 4, 441-454
- Hackett, G. (2000) Children still class bound, *Times Educational Supplement*, 21/4/00, p.11
- Hess, F. (2000) *Hints of the pick-axe: the impact of competition on public schooling in Milwaukee*, presentation at AERA, New Orleans, April
- Howson, J. (2000) Solid state, *Times Educational Supplement*, 14/7/00, p. 24
- Jeynes, W. (2000) Assessing school choice: a balanced perspective, *Cambridge Journal of Education*, 30, 2, 223-241
- Le Grand, J. and Bartlett, W. (1993) *Quasi-Markets and Social Policy*, Basingstoke: Macmillan
- Levin, B. and Riffel, J. (1997), School System Responses to External Change: implications for school choice, in Glatter, R., Woods, P. and Bagley, C. (Eds.) *Choice and Diversity in Schooling. Perspectives and Prospects*, London: Routledge
- McGuinn, P. and Hess, F. (2000) *Business as usual: the minimal competitive effects of the Cleveland Voucher Program*, presentation at AERA, New Orleans, April
- Plewis, I. (1999) Educational inequalities and education action zones, in Pantazis, C. and Gordon, D. (Eds.) *Tackling inequalities*, Bristol: Policy Press
- Taylor, C. and Gorard, S. (2001) *'Local schools for local children' and the role of residence in stratification*, Working Paper 39, Cardiff: Cardiff University School of Social Sciences
- Taylor, C., Gorard, S. and Fitz, J. (2000a) *Size matters: does school choice lead to 'spirals of decline'? Measuring Markets: the case of the ERA 1988 Working Paper 36*, Cardiff: Cardiff University School of Social Sciences

- Taylor, C., Gorard, S. and Fitz, J. (2000b) A re-examination of stratification indices in terms of compositional invariance, *Social Research Update*, 30, 1-4
- Waslander, S. and Thrupp, M. (1997) Choice, competition, and stratification: An empirical analysis of a New Zealand secondary school market, 1990-93, in Halsey, A., Lauder, H., Brown, P. and Wells, A. (Eds.) *Education Culture, Economy, and Society*, Oxford: Oxford University Press
- White, P., Gorard, S., Fitz, J. and Taylor, C. (2001) Regional and local differences in admission arrangements for schools, *Oxford Review of Education*, 27, 3
- Witte J. (1990) Introduction, in Clune W. and Witte J. (Eds.) *Choice and Control in American Education, Volume 1: The theory of choice and control in education*, London: Falmer Press
- Zirkel, P. (1999) Grade inflation: a leadership opportunity for schools of education?, *Teachers College Record*, 101, 2, 247-260



U.S. Department of Education
Office of Educational Research and
Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center
(ERIC)



Reproduction Release (Specific Document)




I. DOCUMENT IDENTIFICATION:

Title:	The long term impact of school choice in the UK		
Author(s):	Stephen GORARD		
Corporate Source:	Codrill University, UK	Publication Date:	2001

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
<p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY</p> <p>_____</p> <p>_____</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p>	<p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY</p> <p>_____</p> <p>_____</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p>	<p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED</p> <p>_____</p> <p>_____</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p>
Level 1	Level 2A	Level 2B
		
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only
Documents will be processed as indicated provided reproduction quality permits		
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.		

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.			
Signature:	Printed Name/Position/Title: PROF S. GORARD		
Organization/Address:	Telephone: 442920 875113	Fax:	Date: 3/3/02
	E-mail Address: GORARD@CF.AC.UK		

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

<p>Send this form to the following ERIC Clearinghouse:</p> <p>Document Acquisitions Department ERIC Clearinghouse on Educational Management 5207 University of Oregon Eugene, Oregon 97403-5207</p>
